HISTORY IS IN THE LAND

Multivocal Tribal Traditions in Arizona's San Pedro Valley

T. J. Ferguson and Chip Colwell-Chanthaphonh

With a Foreword by Robert W. Preucel

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In Memory of Jeanette Cassa

ONE VALLEY, MANY HISTORIES

An Introduction

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ONE EARLY MORNING IN THE autumn of 1989 Bill Doelle stood hunched over a car hood studying maps of the San Pedro Valley, figuring the best way to survey more than 121 km (75 mi) of open desert. Daunted by the prospect, the archaeologist, at the very least, knew he was not the first to come to the valley hoping to understand its history. A century before, in the 1880s, the legendary anthropologist Adolph F. Bandelier traveled to the valley to map several large ruins. Anthropologist Jesse Walter Fewkes then came in 1908 to investigate the platform mounds in the valley, and geographers Carl Sauer and Donald Brand studied settlement patterns in 1929. In the 1930s Byron Cummings of the University of Arizona began the first formal excavations in the San Pedro, soon followed by the work of Charles Di Peso of the Amerind Foundation, a private museum, in the 1940s and 1950s. Bill Doelle knew how E. B. Sayles, Ernst Antevs, and Emil Haury in 1955 began excavating a site near the international border after a local rancher named Ed Lehner noticed some bones eroding from the edges of a wash. These archaeologists found 13 Paleoindian points in context with nine mammoth skeletons, 11,000 years old. Yet Bill aimed to do something unique because, unlike these previous researchers, he wanted to grasp the river valley in its entirety—to understand how villages through time were related to one another and linked to agricultural practices, wildlife resources, and the vast and ancient cultural systems of North America's Greater Southwest.

The work began with patience. Bill Doelle initiated a partnership with scholars Allen Dart and Henry Wallace, and they decided to focus on the richest cultural and natural zones of the valley, covering more than a kilometer on each side of the San Pedro River. They recruited dozens of volunteers to work with the Center for Desert Archaeology, enthusiastically devoting their weekends to walking the land back and forth in 20-m (6-ft) intervals. When volunteer archaeologists spotted fragments of pottery or rows of cobblestones, they stopped and

assiduously recorded the site's location, counting artifacts and mapping features. What they observed confirmed the valley's abundant cultural heritage. They found ancient villages, 800 years old, perched on steep terraces; they found panels of petroglyphs and pictographs; they found hectares of "dry farming" alignments and rock piles for cultivating agave plants. When the survey was completed five years later, nearly 500 distinct sites had been recorded, representing thousands of years of human history.

As Bill Doelle and his colleagues continued their research program in the 1990s, analyzing survey data and initiating test excavations at selected sites, they realized they were acquiring substantial scientific data but had little understanding of what these places mean to contemporary Native Americans whose ancestors once occupied the valley. Bill recognized that learning how Native peoples conceive of their ancestors, documenting the cultural values descendant communities have for ancestral villages, and understanding the historical narratives embedded in tribal traditions are important elements for a humanistic understanding of the past and for the equitable management of cultural resources in the future. He realized that archaeology alone could not provide all of the information needed to fully understand the past. This was the beginning of the San Pedro Ethnohistory Project.

The San Pedro Ethnohistory Project

The San Pedro River begins in northern Mexico and flows northward 225 km (140 mi) into southeastern Arizona, forming a lush riparian oasis in the midst of the harsh Sonoran Desert (fig. 1). The watershed today is habitat to more than 80 species of mammals, 40 kinds of amphibians and reptiles, and 385 varieties of birds. The contemporary human community is almost as diverse as the natural one. Small hamlets like Winkleman and Mammoth are the remains of Arizona's fading mining industry; Redington and Hereford are homes to ranching families; Cascabel is an escape for Tucsonans disenchanted with city life; the farming towns of Pomerene and St. David are Mormon communities founded in the late nineteenth century; a military base, Fort Huachuca, in Sierra Vista is the heart of the valley's largest settlement of 40,000 people. The San Pedro is one of the last free-flowing rivers in North America, although, as writer Barbara Kingsolver (2000:84) points out, since the waters rarely run more than 1 m (3 ft) across, "mostly it's a sparkling anomaly for sunstruck eyes, a thread of blue-green relief."

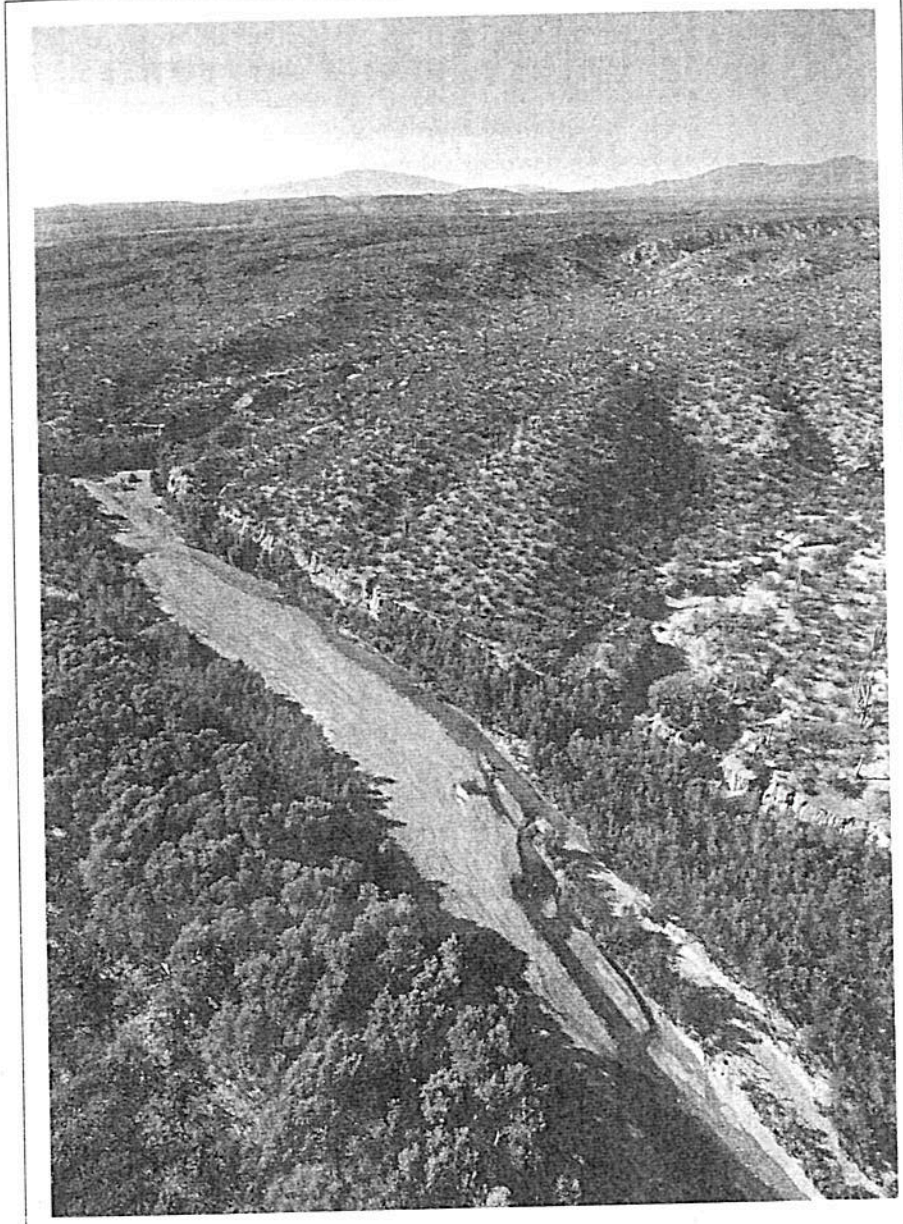

Figure 1 › **The Upper San Pedro Valley looking southwest.**
(Adriel Heisey/Center for Desert Archaeology)

The Tohono O'odham, Hopi, Zuni, and Western Apache peoples all have ancestors who lived in the San Pedro Valley in the past. These Native Americans maintain distinct oral traditions that provide an anthropological context for interpreting the history and archaeology of the San Pedro Valley. Previous research in the San Pedro Valley was focused on scientific archaeology and documentary history, with a conspicuous absence of Native American voices. This created an interpretive silence that excluded the unique perspectives of descendant communities. The San Pedro Ethnohistory Project was designed as collaborative research with four Indian tribes to redress this situation by visiting archaeological sites, studying museum collections, and interviewing tribal members to collect traditional histories. The information gathered during the project is arrayed in this book with archaeological and documentary data to interpret the histories of Native American occupation of the San Pedro Valley.

This project is the first concerted effort to record tribal traditions relating to the San Pedro Valley and integrate them with ethnohistoric and archaeological information. The resulting multivocality of Native American histories provides a significant humanistic context for the public interpretation of scientific data. Collaboration between Native Americans and archaeologists has yielded results that would not be obtainable if traditional history and archaeology were not investigated in tandem. The results of this project will be of interest to Native Americans, archaeologists, anthropologists, historians, and the general public interested in the southwestern United States. The research themes explored in the project—migration, warfare, social identity, subsistence ecology, and population dynamics—are all important issues in the archaeological study of the past. These themes were examined using a conceptual framework of cultural landscapes that seeks to understand how land is perceived by individuals given their particular values and beliefs. Studying how Native Americans situate themselves in the historical time and geographical space of the San Pedro Valley helps ground how places and landscapes have the power to symbolize and recall the past.

This particular project began in 1999, when Bill Doelle and Henry Wallace invited T. J. Ferguson and Roger Anyon to design a project to work with interested tribes to research ethnohistory relating to the San Pedro Valley. Organized through the Center for Desert Archaeology, a private nonprofit organization in Tucson, Arizona, Bill, Henry, T. J., and Roger met with a series of tribes to determine their

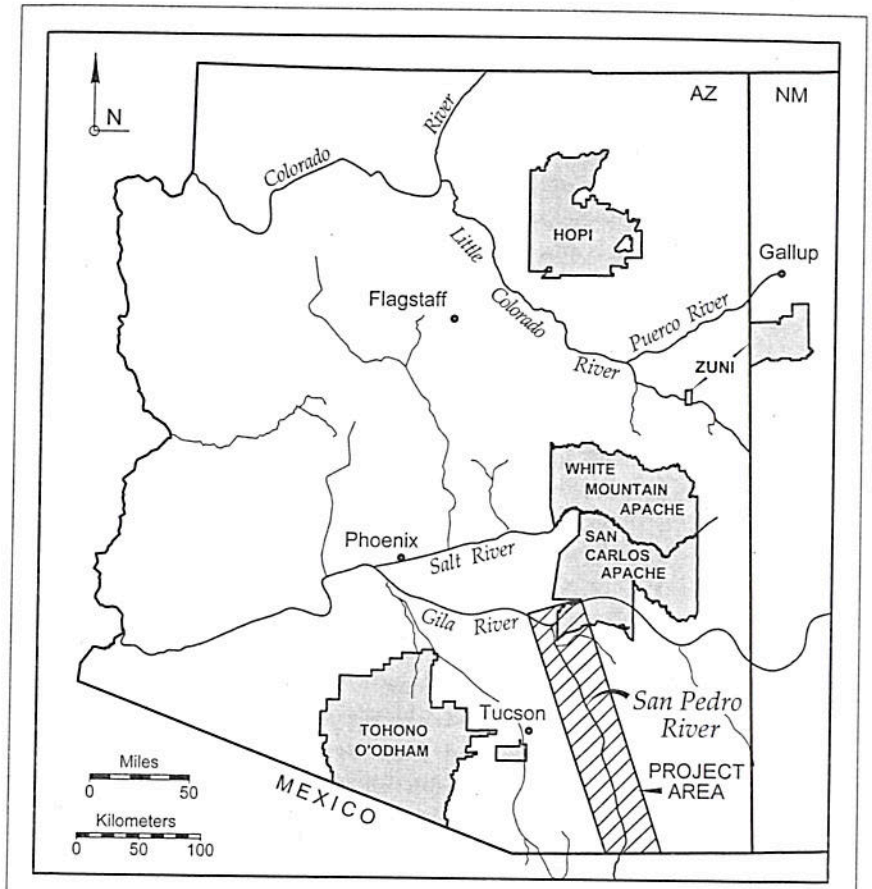

Figure 2 › **The location of the tribes participating in this project.**
(Center for Desert Archaeology)

interest in the proposed research. During these meetings, the Tohono O'odham, Hopi, Zuni, and a consortium of the San Carlos and White Mountain Apache tribes decided to participate in the project (fig. 2). With the support of the tribes, the Center for Desert Archaeology prepared and submitted a grant proposal to the National Endowment for the Humanities that was funded in 2001. When work on the project began, Chip Colwell-Chanthaphonh received a fellowship at the Center, and he joined T.J. and Roger as a principal investigator on the project. Research with cultural advisors from the four tribes took place over the next three years.

Native Americans and Archaeologists

In the midst of the current debate about repatriation, reburial, and the study of Native artifacts and remains it is easy to forget that the exchange between Native Americans and archaeologists has long been cacophonous (Ferguson 1996a; McGuire 2004). From its beginning in the Americas, archaeology has been part of a colonial enterprise associated with the expansionist policies of European and American powers. These policies affected the ability of Native people to maintain sovereignty over their land and way of life. As the 1800s drew to a close colonial activities progressed to include digging ancient graves and villages. The impassiveness of many nineteenth-century scholars to the political, social, and biological threats facing Native populations nourished the passions of collecting. Many scholars thought Native Americans were destined to become extinct, and it was thus important to amass collections while these were still available.

In one well-known case, following the genocidal slaughter at Sand Creek (which included the murder of children, the mutilation of bodies, and the parading of body parts in downtown Denver, Colorado), the heads of several Cheyenne victims were detached and sent to the newly established Army Medical Museum; the remains were eventually transferred to the Smithsonian Institution collections (Thomas 2000:57). Although we may now regard such deeds with revulsion, the battlefield plunder at Sand Creek was not an isolated event; rather, it fit into a pattern of behavior that systemically transformed human beings into specimens for scientific inquiry. Anthropology, as a burgeoning science, recurrently objectified and dehumanized Native peoples, both reflecting and influencing nineteenth-century Euro-American ideologies and sentiments (Archambault 1993; Kehoe 1998; McGuire 1997; Watkins 2003).

Even as Native Americans were disempowered through the sheer number and military might of the Euro-Americans who invaded their lands, they were not always, or simply, victims. As early as 1883 Apache men confronted U.S. Army soldiers at Fort Apache in central Arizona and demanded that they return artifacts pilfered from a nearby cave (Welch 2000:70). The nineteenth-century ethnographer Frank Hamilton Cushing's sojourn at the Pueblo of Zuni, although controversial, eventually developed into a reciprocal relationship in which he recorded Zuni culture while the Zuni used him as liaison with outside authorities to protect their interests (Green 1979; Hart 2003:112). In contrast, Cushing was unable to establish such rapport at Oraibi,

where the Hopis vigorously rebuffed his efforts to collect items for the Smithsonian (Hinsley 1992:18–19; Parezo 1985:768–771; Parsons 1922:253–268). Several decades later Stewart Culin traveled to Zuni with the narrow goal of amassing artifacts for the Brooklyn Institute of Arts and Sciences (Fane 1992). Although the town crier emphatically warned citizens not to sell objects to him, Culin achieved his purpose because he had arrived during a terrible drought. The Zuni desperately needed money to buy food, and, in order to insure their survival, they sold sacred artifacts (Ladd 1994:19).

During the nineteenth and twentieth centuries Native Americans in the Southwest were hired as laborers to help excavate archaeological sites. The Awat'ovi Project in the late 1930s, for example, employed over a dozen Hopi laborers (Adams 1994). Yet this project was not without dissension, and archaeologists were ultimately forced to leave when the Hopi Tribal Council, established under the auspices of the Indian Reorganization Act, prohibited the expedition from working on the reservation (Elliott 1995:180). More recently, the Hopi have decided not to develop Awat'ovi as a tourist destination in part because of concerns for the spiritual well-being of visitors and the possible deleterious impact on the site itself (Notarianni 1990).

Acting on similar concerns, at the end of the nineteenth century Hopi village leaders forbade their members from assisting Jesse Walter Fewkes (1904:112) in the excavation of Old Songòopavi, where in two days' work more than 100 burials had been unearthed. Likewise, in the 1940s on the Tohono O'odham reservation elders did not permit archaeologist Emil Haury (1950:44) to dig at the cave site Wihomki "on the grounds that Lightning lived in this cave, that it was a sacred place and should not be touched." The community's elders believed the thunderbolt spirit in the cave could withhold the rain; no one visited the cave except to make prayers in times of drought (Hayden 1977).

After the United States dispossessed Native Americans of most of their land and confined them to reservations, the role of Native people in American society changed. The image of the American Indian was commodified through the mushrooming tourist trade in the Southwest, as the desert was imaginatively transformed from a "wasteland" into an "oasis" (Sokol 1993). By the early 1900s the American Southwest, itself an embryonic concept, was emerging as an "aesthetic wonderland" wound up with the occupations and identities of artists, poets, and travel writers (Padget 1995; Teague 1997). Connected to this movement, museums and private collectors sought

out Indian artifacts to embellish exhibits and boost their symbolic capital (Berlo 1992). The relationship between archaeologists and Native Americans in the Southwest grew more complex and at times ambiguous and distant as science was coupled with the growing heritage tourism and Indian art trade. The rise of a new paradigm called "processual archaeology" sought to turn the study of the past from a humanistic pursuit of culture histories into an objective science of universal laws. In practice, although processual archaeology credited Native peoples for their remarkable technological achievements, the unwavering archaeological commitment to empirical positivism ultimately served to alienate living Native peoples from their own history (Trigger 1989:312–319).

By the late 1960s, when archaeologists were deeply enraptured with processual archaeology, Native Americans had solidified a powerful political movement that reached out to a "supratribal consciousness" (Cornell 1988). Although Native peoples had long resisted the scientific appropriation of their ancestors' bodies and belongings, Native American protests of how archaeology was conducted gained a certain degree of legitimacy and a measure of public notice (Fine-Dare 2002). The complaints were manifold but fundamentally grounded in the suggestion that for many American Indians archaeological excavations and collections constitute a desecration of their ancestors and a disrespect for their contemporary beliefs (Hubert 1994). One of the most vocal critics of anthropological endeavors was and remains Vine Deloria, Jr., whose *Custer Died for Your Sins* censures researchers for their self-centered use of Indians as scientific objects, failing to address the needs of living people, and presuming to speak for Indians (and not even doing a good job of it). Deloria (1988:95) argues that anthropological research benefits only the anthropologist and asks, "Why should we continue to be the private zoos for anthropologists? Why should tribes have to compete with scholars for funds when the scholarly productions are so useless and irrelevant to real life?" The intellectual critique of anthropology was turned into social action when several well-publicized protests interrupted excavations and museum operations (Echo-Hawk and Echo-Hawk 1994). Trigger (1980:670) lamented that even as Native American resentment became progressively evident in the late 1970s, most archaeologists had still "not begun seriously to assess archaeology's moral and intellectual responsibility to native people."

As archaeology became ever more controversial Native peoples

sought to increase their control over ancestral heritage resources. In the decades following the passage of the National Historic Preservation Act of 1966 several tribes established their own cultural resource management programs, including the Zuni, Hopi, Tohono O'odham, and Apache tribes. As tribes hired non-Indian archaeologists to work with tribal members, positive new relationships were forged, creating more balance between scientific and tribal values (Anyon et al. 2000; Downer 1997). In some instances these relationships were built upon the research that archaeologists provided tribes during the litigation of land and water rights as well as the support for the tribal management of cultural resources. In the crucible of tribal historic preservation programs archaeologists began to demonstrate that archaeology could be practiced in a manner both relevant to and respectful of tribal goals and values.

By the early 1980s the political and social problems created by standard anthropological practice could no longer be legitimately ignored by the profession as a whole. With the help of outside critics like Deloria and inside paladins like Trigger, archaeologists and Native peoples increased their sometimes contentious dialogue. Throughout the 1980s Native peoples gained a powerful voice and more control over the disposition and interpretation of their heritage. In November 1990 this movement led Congress to enact the Native American Graves Protection and Repatriation Act (NAGPRA), which required all museums that received federal funding to produce inventories and summaries of the human remains and sacred objects in their collections, distribute this information to federally recognized tribes, and allow the tribes to determine the ultimate disposition of those objects with which they had a demonstrated cultural affiliation (Bray 2001; Mihesuah 2000). NAGPRA also established Native American ownership and control over human remains, sacred objects, and objects of cultural patrimony discovered on federal or Indian land after 1990, and this irrevocably impacted the way archaeologists pursue research and store collections. NAGPRA dramatically shifted the relationship between Native Americans and archaeologists by reallocating the power and control over how archaeology is conducted, distancing anthropologists from a position of final authority. Beyond repatriation, NAGPRA has had the unintentional but significant effect of forcing different interest groups to work together, during which they have discovered common concerns and new kinds of mutually beneficial research (Dowdall and Parrish 2003; Kelly 2000; Killion and Molloy

2000; Preucel et al. 2003). In the new millennium collaborative work with Native peoples has produced an increasing amity, although, as the "Kennewick Man" (Downey 2000; Watkins 2004) and cannibalism (Billman et al. 2000; Dongoske et al. 2000) controversies demonstrate, difference and conflict are never far away.

Methodologies

From the outset the San Pedro Ethnohistory Project was designed as collaborative research. A straightforward plan of work was developed to conduct research with the four tribes participating in the project. This plan of work included fieldwork with tribal cultural advisors to visit archaeological sites along the San Pedro River, museum research to study artifacts collected from ancient sites in the valley, and interviews with tribal members to elicit traditional histories. Research with each tribe was conducted separately in order to maintain confidentiality of tribal information until the tribe approved its release to the public. The research calendar extended from April 2000 to November 2003.

After the project was funded meetings were conducted with officials of the Tohono O'odham, Hopi, Zuni, and San Carlos Apache tribes to review the project methodology and seek suggestions for its improvement. Throughout the project our tribal research colleagues made suggestions about how to best conduct the research, and these were always accommodated. For example, the San Carlos Apache research participants decided they were less interested in visiting archaeological sites than in pursuing place-names research, so much of their fieldwork was arranged to facilitate this approach.

ORGANIZATION OF TRIBAL RESEARCH TEAMS AND TRIBAL REVIEW

Each of the four participating tribes determined its administrative structure for the project. This included designating a point of contact with the tribe, establishing a tribal research team that took part in research activities, and identifying individual tribal members to interview (table 1). The point of contact at the Tohono O'odham Nation was the Cultural Committee, composed of members of the Tohono O'odham Tribal Council (fig. 3). Members of the committee made several field trips to the San Pedro Valley to familiarize themselves with the project area. The Cultural Committee selected Bernard G. Siquieros as a tribal researcher to help organize and conduct work with Tohono O'odham Nation members. With the assistance of Mr. Siquieros, José R. Enriquez,

Joseph M. Enriquez, Edmund Garcia, and Jacob Pablo were selected to serve on a research team. Periodic review sessions were held with the Cultural Committee to discuss the status and results of research with tribal members, including one session during which an oral report was provided to the entire Tribal Council.

Table 1 ›
CALENDAR OF RESEARCH FOR THE SAN PEDRO ETHNOHISTORY PROJECT

Date	O'odham	Hopi	Zuni	Apache
April 10, 2000	F			
August 2, 2001		R		
October 25, 2001		R		
October 31, 2001	R			
December 17, 2001				R
December 19, 2001	F			
January 7, 2002	F			
January 9, 2002				R
January 13, 2002				F
January 24, 2002		R		
February 18, 2002				F
February 19, 2002				F
April 8, 2002				F
April 23, 2002			F	
April 24, 2002			F	
April 25, 2002			M	
April 26, 2002			M	
April 30, 2002		F		
May 1, 2002		F		
May 2, 2002		M		
May 3, 2002		M		
June 3, 2002		I		
June 4, 2002		I		
June 5, 2002		I		
June 6, 2002		I		
July 7, 2002			I	
October 2, 2002	F			
October 25, 2002		I		
October 25, 2002		I		
October 29, 2002	F			
December 4, 2002				R
December 9, 2002	M			
December 10, 2002	M			
December 12, 2002	R			
January 3, 2003				F
January 15, 2003	R			
January 24, 2003				M
February 4, 2003				I
February 7, 2003	I			
February 11, 2003				F
May 5, 2003	R			
June 7, 2004		I		
October 23, 2004		I		
October 23, 2004		R		
November 6, 2003	R	R		

F = Fieldwork
I = Interviews
M = Museum research
R = Review meeting

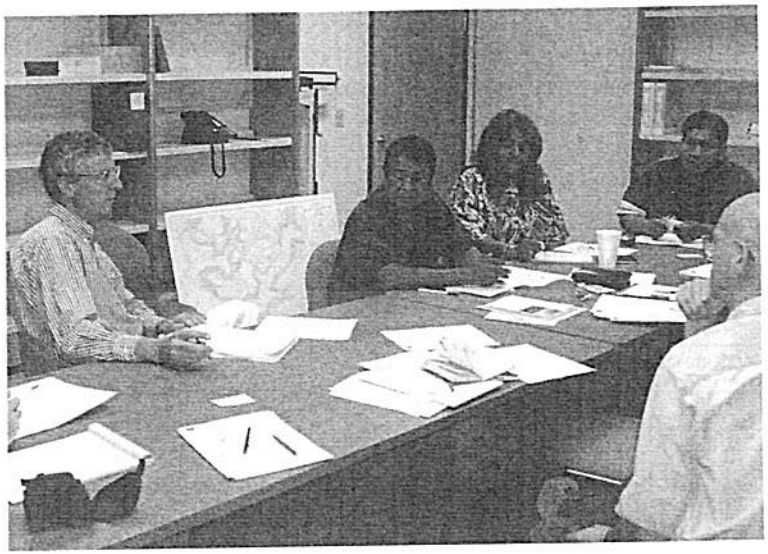

Figure 3 › **Meeting with the Tohono O'odham Culture Committee.**
(T. J. Ferguson, October 31, 2001)

Work with the Hopi Tribe was administered through the Hopi Cultural Preservation Office, under the direction of Leigh J. Kuwanwisiwma. Members of the Hopi Tribal Council and the Hopi Cultural Resources Advisory Task Team were selected to serve on the research team, including Leroy Lewis, Floyd Lomakuyvaya, Harold Polingyumptewa, and Dalton Taylor. Joel Nicholas from the Cultural Preservation Office served as a tribal researcher to assist with project logistics and research. Tribal review of research was conducted during the regular meetings of the Cultural Resources Advisory Task Team and by consulting individual members of the research team.

Research with the Pueblo of Zuni was facilitated by the Zuni Heritage and Historic Preservation Office, under the direction of Jonathan Damp and Suzette Homer. Members of the Zuni Cultural Resources Advisory Team were selected to serve as a research team, including John Bowannie, Leland Kaamasee, Octavius Seowtewa, and Perry Tsadiasi. Jerome Zunie of the Zuni Cultural Resources Enterprise assisted this team as a tribal researcher. Tribal review of the project was accomplished during fieldwork and interviews with research team members and through correspondence.

Western Apache participation in the project was organized as a consortium of the San Carlos and White Mountain Apache Tribes, with the San Carlos Apache Tribe acting as the lead tribe. Jeanette Cassa served as a tribal researcher, assisted by Seth Pilsk. In lieu of constituting a formal research team, different sets of tribal members were assembled to participate in project research based on their geographical knowledge and cultural expertise. San Carlos Apache tribal members participating in fieldwork included Phoebe Aday, Vernelda Grant, Howard Hooke, Sr., Rosalie P. Talgo, and Stevenson Talgo. Ramon Riley from the White Mountain Apache Tribe also participated in fieldwork. Tribal review was accomplished by consulting Jeanette Cassa and Seth Pilsk and meeting with the Elders Cultural Advisory Council of the San Carlos Apache Tribe.

FIELDWORK

Fieldwork was conducted in a free-flowing dialogue that generally started with archaeologists describing what they knew about archaeological sites and culture history, followed by questions and discussions with tribal research participants. Research participants were then given the opportunity to explore sites at their own pace. The original plan of fieldwork was to spend two days with tribal research teams visiting archaeological sites in the San Pedro Valley. The rationale was to provide a common experience for research participants from all four tribes to facilitate the discussion of tribal histories as they intersect with the accounts of other tribes. As the fieldwork unfolded this plan of work was modified to include additional field trips requested by the Tohono O'odham Nation and fieldwork to research Apache place-names requested by the San Carlos Apache researchers. The set of archaeological sites visited by all tribal research participants included a platform mound at Flieger Ruin, a Hohokam and Sobaipuri site at Alder Wash, migrant Pueblo settlements at the Davis Ranch Site and Reeve Ruin, a Sobaipuri village at Gaybanipitea, and a Spanish presidio at Terrenate (fig. 4).

With few exceptions, there were always two to four researchers participating in fieldwork, and this meant that there were generally multiple discussions going on as research participants walked across archaeological sites examining the features of interest to them. Each researcher recorded information in handwritten field notes (fig. 5). In order to provide a coherent record, at the conclusion of fieldwork these notes were compiled into a single document, which was subsequently

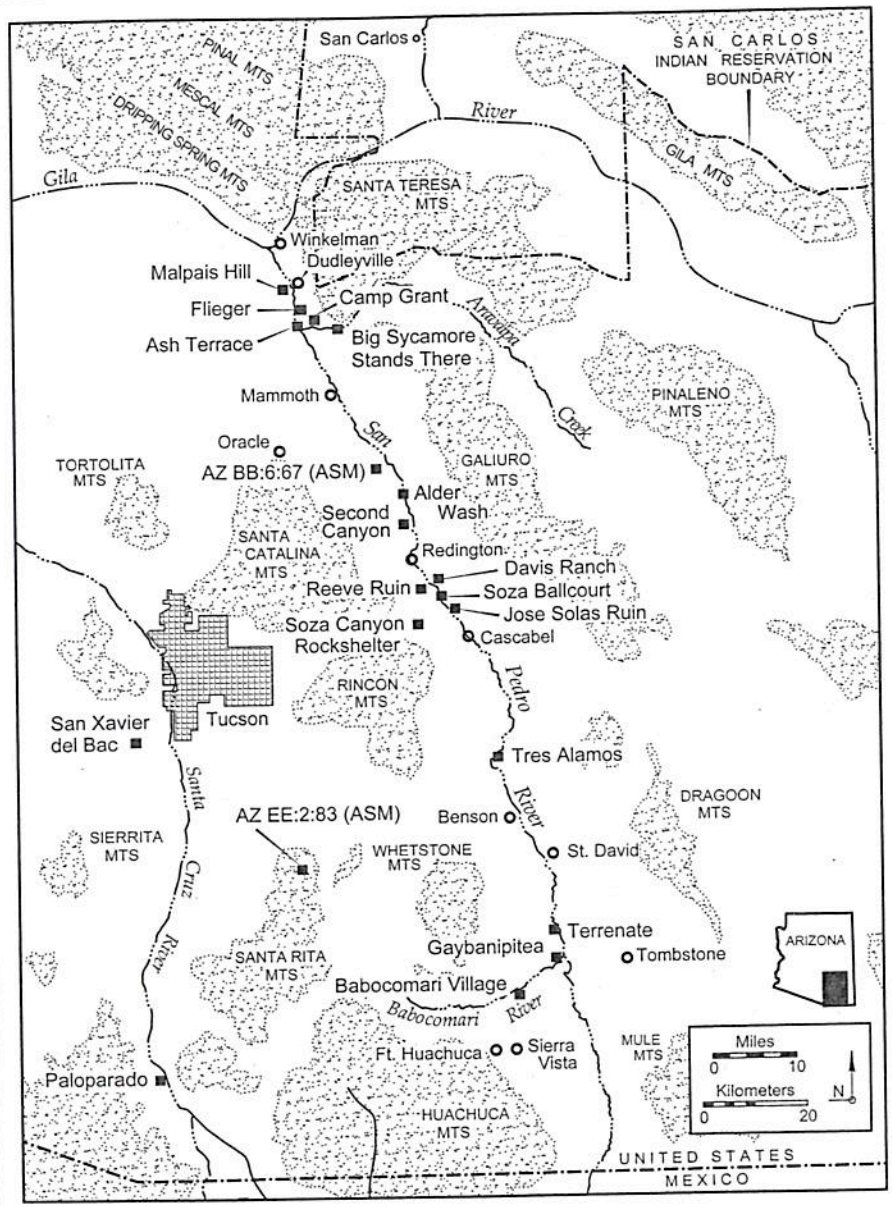

Figure 4 › **Places in southeastern Arizona included in fieldwork and museum research.** (Center for Desert Archaeology)

Figure 5 › **Dalton Taylor (center) explains Hopi clan migrations at Reeve Ruin.** (T. J. Ferguson, May 2, 2002)

sent to the tribes for review (Ferguson and Colwell-Chanthaphonh 2003). This process allowed project researchers to compare notes and agree on the substance of the matters discussed during fieldwork. During fieldwork in the San Pedro Valley a series of research questions were asked to elicit information about how a site figured into tribal history, specific interpretations of site features and artifacts, how landscape is related to history, and tribal values for cultural resources, including thoughts about vandalism.

MUSEUM RESEARCH

Research of artifacts collected from archaeological sites in the San Pedro Valley was conducted with tribal research participants at the Amerind Foundation Museum and the Arizona State Museum (fig. 6). The objectives of this research were to record Native names and classificatory terms for artifacts, identify the functions of artifacts and their similarities to material culture still used today, and educe how social identity is expressed in material form. A list of the artifacts studied during the project includes 231 artifacts from six sites curated at the Amerind Foundation and 93 artifacts from 10 sites

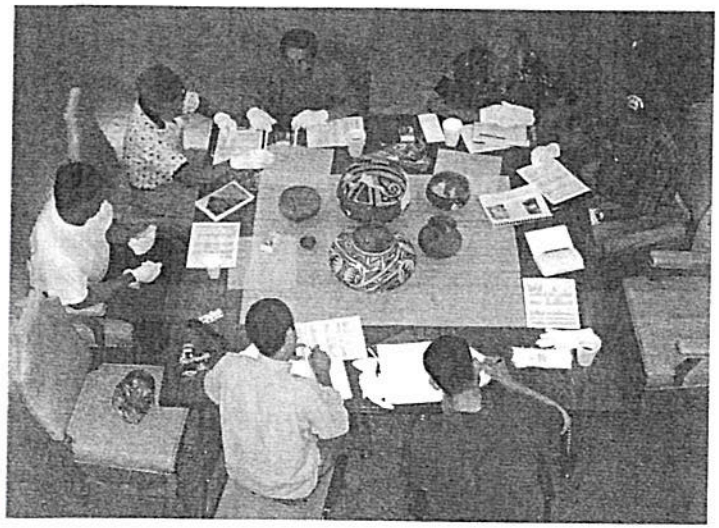

Figure 6 › **The Zuni research team studying ceramics at the Amerind Foundation Museum.** (T. J. Ferguson, April 25, 2002)

Figure 7 › **Chip Colwell-Chanthaphonh interviews Harlan Williams at Musangnuvi.** (T. J. Ferguson, October 23, 2002)

curated at the Arizona State Museum (Appendixes 1 and 2). Most of these artifacts came from the sites visited during fieldwork, and this provided tribal researchers with an enhanced understanding of the material basis of past life at these sites. The study of artifacts provided a productive way to clarify and extend discussions about tribal history that were initiated during fieldwork. Significantly, our tribal research colleagues did not treat artifacts as static and inert things of little consequence but as living forces that shaped their sense of identity and world order (Colwell-Chanthaphonh 2004a).

INTERVIEWS

Interviews were conducted with members of each of the participating tribes to collect additional information and perspectives about tribal history associated with the San Pedro River valley (fig. 7). A schedule of questions was used to guide the interviews, using an open-ended conversational technique that allowed the people being interviewed to address additional topics that came to mind as the San Pedro Valley was discussed. The focus of the interviews was on the collection of qualitative rather than quantitative data.

Follow-up interviews with many of the people who participated in fieldwork were conducted to discuss their thoughts about the San Pedro Valley after they returned home and had time to reflect on what they had seen. The tribal research teams also identified fellow tribal members who are knowledgeable about tribal history, and these people were interviewed to expand the base of knowledge for the project. Many of the interviews took place in the homes of tribal members; others were conducted in tribal offices or Elderly Program buildings. The interviews were documented with handwritten notes that were later word processed and provided to tribal research teams for review. The choice of being interviewed individually or collectively in a group was left up to the people being interviewed. During the interviews maps and photographs of sites and artifacts were used to direct attention to the topics being discussed. Because petroglyph sites were too remote to visit during fieldwork, slides of petroglyphs and pictographs in the San Pedro Valley were shown to and discussed in group interviews of research teams during visits to the Center for Desert Archaeology.

On the Tohono O'odham Reservation interviews were conducted with José Enriquez, Joseph Enriquez, and Edmund Garcia, all of whom participated in the fieldwork. Additional O'odham interviews were conducted with Lena R. Ramon, Patrick J. Franco, and Anita E.

Antone at the San Xavier Elderly Center. Hopi tribal members who were interviewed included Donald Dawahongnewa, Valjean Joshevama, Sr., Wilmer R. Kavena, Eldon Kewanyama, Wilton Kooyahoema, Sr., Leigh J. Kuwanwisiwma, Lee Wayne Lomayestewa, Micah Loma'omvaya, Harlan Nakala, Joel Nicholas, Lewis Numkena, Jr., Owen Numkena, Jr., Morgan Saufkie, Jim Tawyesva, and Harlan Williams. Seven Hopi female potters were interviewed in a group to collect their thoughts about the technology and design used in San Pedro ceramics. These Hopi potters included Karen Kahe Charley, Ruby A. Chimerica, Tonita Hamilton, Marilyn Mahle, Lorena S. Pongyesva, Jessie F. Talaswaima, and Phyllis Wittsell. At Zuni the researchers who participated in fieldwork elected to be interviewed as a group, including Leland Kaamasee, Octavius Seowtewa, and Perry Tsadiasi. Three White Mountain Apache tribal members were also interviewed, including Ramon Riley, Beverly Malone, and Eva Watt.

PROJECT REFLEXIVITY

The project was implemented with a reflexivity that sought to take into account the effect of the researchers on what was investigated and to adapt the research design to the needs and interests of tribal research participants (see Colwell-Chanthaphonh and Ferguson 2004; Ferguson et al. 2004). This included having all research participants sign an informed consent form that reviewed the project goals and how the information collected during research would be used. An element of this form, reiterated orally, clearly let research participants know that they did not have to answer questions that they thought intruded on esoteric knowledge meant only for tribal members.

We were conscious of the asymmetrical power that archaeological naming and terminology such as "Hohokam" and "Anasazi" can have in collaborative research. While we took care to explain the concepts archaeologists use and thus establish a foundation for communication, we also encouraged tribal research participants to use Native terms and concepts to the extent they wanted to share those with us. Much of the fieldwork and museum research and many of the interviews were conducted in Native languages not spoken by the non-Indian researchers. Translation into English was proffered by tribal researchers to summarize the discussion of cultural advisors and construct a written record for use in research. We encouraged our tribal colleagues not to translate into English any information that should remain confidential. Language was thus used to filter the

information appropriate for use in scholarly activities intended for public education.

We originally conceived of this project as a means to engage Native peoples in archaeological research that was conducted outside the sometimes contentious social and political arena associated with NAGPRA. As the project was implemented, however, it became clear that one of the reasons some participants were interested in taking part in the research was to compile information their tribes could use in future NAGPRA activities. We respected the legitimacy of this interest and thus accommodated the imposition of a NAGPRA frame of reference in project research. This frame of reference revolved around the concept of cultural affiliation, the historically traceable shared identity between a present-day Indian tribe and a past identifiable group. Rather than deny the contemporary relevance and power of this concept, we decided to use it to explore the research themes of the project. While NAGPRA was thus in the background of much of the discourse that transpired, none of the research participants overtly politicized the research. All of the tribal research participants demonstrated respect for and interest in the beliefs and views of other tribes.

We were also cognizant of a blurred line between the role of the anthropologists as observers and the role of Native cultural advisors as informants. Throughout the project our tribal colleagues, as we did, took notes, photographs, and video for their personal use and the archives of their tribal offices. Tribal researchers were also crucial in setting up appointments and presenting our project to community members. We found that the Indians were studying us as anthropologists, trying to figure out how and why we come to believe what we do, as much as we were studying Native peoples and their history in the San Pedro Valley. These realizations challenged our sense of professional relationships, gave insight into the nature of contemporary historiography, and helped instill a spirit of collaboration in project research.

Research Themes

Our project explored themes common to both Native American traditional histories and archaeological research. Native American traditional histories of migration have been the object of study in southwestern anthropology for more than a century (e.g., Cushing 1896; Fewkes 1900), and interest in this topic has been renewed in recent years (Bahr et al. 1994). Archaeologists in particular have

recently published numerous theoretical and empirical studies documenting the importance of migration in explaining culture change in the ancient past (e.g., Duff 1998; Mills 1998; Spielmann 1998; Stone 2003; Woodson 1999). In the San Pedro Valley Native American traditional histories help answer a number of questions that archaeologists have posed. These questions include, How did migrations from the Hopi-Kayenta region into the San Pedro Valley influence the development of platform mound settlements? What role did migration out of the San Pedro Valley play in the subsequent development of O'odham, Hopi, and Zuni? How important is the San Pedro Valley in the early migration of the Apache peoples in southern Arizona?

The role of violence and warfare in the ancient past is a topic of substantial interest in southwestern archaeology (Haas and Creamer 1993, 1996, 1997; Jett 1964; LeBlanc 1999; Linton 1944; Wilcox and Haas 1994; Woodbury 1959; Wright 1976). Archaeologists have come to realize that competition for resources and other conflicts occasionally led to incidents of violence that had a profound impact on the settlement patterns of various regions at different times. The defensible location and architectural structure of many settlements in the San Pedro Valley suggest that concerns about potential violence may have been an important factor in where people located themselves on the landscape and how they built their settlements. This is particularly true for sites associated with Puebloan immigration after A.D. 1200, notably Reeve Ruin. Whether or not there are traditional histories of conflict in the oral traditions of the O'odham, Hopi, and Zuni is thus a pertinent research question of substantial interest. Information about Apache perspectives on the warfare and raiding described in documentary history is also useful in providing a richer interpretation of the past in both the San Pedro Valley and larger southwestern region (Basso 1993).

Social identity in the ancient past is an important research issue because it has both theoretical implications for anthropological research and practical implications in cultural resources management and historic preservation (e.g., Crown 1994; Ferguson 2004; Hays-Gilpin and Hill 2000; Stark 1998; Upham et al. 1994). There are often significant differences in the types of past social groups recognized by Native Americans and archaeologists and the means by which these groups are discerned. Whereas Native Americans often understand the past in terms of clans and other ancestral kin groups, archaeologists commonly understand the past in terms of abstract

archaeological cultures (Dongoske et al. 1997). Both of these perspectives have cultural and intellectual validity in the contexts in which they are used. Our interest in understanding what ancient groups Native Americans recognize as inhabiting the San Pedro Valley was coupled with exploring how these groups are identified in the archaeological record. This provides important information about social identity and how it can be recognized through ceramics and other forms of material culture.

Subsistence ecology is a long-standing research issue in Americanist archaeology, and substantial amounts of data have been collected about this subject (Archer and Hastorf 2000). In the San Pedro Valley Native American perspectives on subsistence ecology offer new outlooks that archaeologists may find useful in their research. Of particular interest is the comparison of ancient agricultural and more recent subsistence ecologies associated with the valley (Buskirk 1986; Hadley et al. 1991). This information will help archaeologists and the general public understand the similarities and differences in how various peoples have used the San Pedro Valley in the past and present.

Population dynamics are an integral component in explaining what people did in the past and why (Cordell et al. 1994; Dean et al. 1994; Hill et al. 2004). There is no question that the various peoples who occupied the San Pedro Valley in different periods all experienced dynamic changes in population size, density, and distribution. Whether or not Native American traditions exist to supplement archaeological information about these population dynamics is thus an important topic. In addition, Native American accounts about the interaction between the Sobaipuri and Apache will augment the relatively meager and partial documentary history that is available.

Detailing Native American traditional histories regarding migration, warfare, social identity, subsistence ecology, and population dynamics in the San Pedro Valley is important in and of itself. While the investigation of some research themes proved to be more productive than others, the information gathered during the project will be valuable for archaeologists and anthropologists seeking to expand the sources of knowledge used in the development of scholarly hypotheses regarding past social relations and settlement patterns. This project is also significant in part because it was structured to redress the false dichotomy raised between "history" and "science" (Schmidt and Patterson 1995). In so doing we redress the legitimacy of a historically informed archaeology by documenting alternative Native

American histories that explicitly recognize past and present use of land and resources in the construction of social identity (Wylie 1995). The project thus helps resolve ongoing issues surrounding the "contested past" by bringing Native Americans into the research process as participants (Hill 1992; Layton 1994). Combining Native American memories of the past with systematic inquiry based on archaeology and history provides a foundation for developing new perspectives on important issues of mutual concern and interest.

The goal of the project was to derive historical narratives drawing upon as many research domains as possible: oral history, traditional knowledge, ethnography, documentary records, and archaeology. The project therefore goes beyond a simple application of traditional history in the interpretation of the archaeological record. The historical narratives created during the project will be useful to archaeologists, but they incorporate sources of information that supplement and transcend archaeology. These narratives provide alternative and complementary views of the past rather than a reification of archaeological cultural history.

The information contributed by tribal research participants during the project has additional value in future efforts to preserve cultural resources in the San Pedro Valley. The increasing pace of development in the region and the urban expansion of Tucson threaten to adversely impact the natural and historical fabric of the San Pedro Valley (Hanson 2001; Steinitz et al. 2003). Over the last several years alone public debate has centered on a plan for 2,000 new homes near Benson, 13,000 homes near Oracle, and 11,000 homes near Sierra Vista (Davis and Fischer 2002; O'Connell 2000; Stauffer 2004). The valley also faces extensive damage from increasing tourism and illicit activities along the international border (Hess 2004; Tobin 2002). Tribal values for ancestral archaeological sites and landscapes provide useful information about how these places should be managed in the coming decades.

Through collaboration with the descendants of the Native peoples who lived in the San Pedro Valley we have endeavored to produce substantive results of interest to scholars and the general public and, at the same time, make both the process and results of archaeological research more relevant to contemporary Native Americans. After more than a century of southwestern archaeology it is time for scholars to reunite their study of the Native American past with descendant communities. "This is not just a problem of public relations or of education,"

as Randall McGuire (1992:828) has written. "It requires more than just a compromise or an accommodation between disciplinary interests and the interests of Indian people. It requires that archaeologists initiate a process of dialogue with Indian peoples that will fundamentally alter the practice of archaeology in the United States."

LANDSCAPES AS HISTORY AND SITES AS MONUMENTS

A Theoretical Perspective

2

THE THEORETICAL FRAMEWORK used to study tribal ethnohistories in the San Pedro Valley is predicated on understanding cultural landscapes as history and archaeological sites as monuments. Although the project area encompasses a single watershed in southern Arizona, the cultural and historical connections between this area and the tribes participating in the project are embedded in a much larger region. Each of the tribes uses cultural landscapes in the construction of contemporary social identity and in the retention and transmission of historical knowledge. The cognition of these cultural landscapes entails concepts of time and space that ground traditional history in specific geographical settings. Anthropological theories about cultural landscapes have gained currency in recent years, especially those that relate to the archaeological record (Ashmore and Knapp 1999; Basso 1996; Bender 1998; Head 1993; Küchler 1993; Mitchell 1994; Morphy 1995; Van Dyke and Alcock 2003; Young 1988; Zedeño 1997). Here we discuss how we use this literature to better understand what the tribal cultural advisors we worked with were telling us about their history and culture.

The word *landscape* was introduced into the English language in the late sixteenth century as a technical term used by painters to describe depictions of rural scenery (Hirsch 1995:2). As commonly used today, the term *landscape* continues to evoke a painterly view or pictorial representation of natural scenery. *Cultural landscapes* are more than natural vistas, however, in that they have an intellectual component, reproduced through local practice and beliefs, that is as important as their visual aspect.

The Dynamics of History and Place in Cultural Landscapes

The cultural landscapes of the Tohono O'odham, Hopi, Zuni, and Western Apache incorporate vast geographical areas and considerable time depths. While each group has a unique cultural landscape

with varied geographic and temporal ranges, the San Pedro Valley provides a common element linking all of them. The natural setting of the San Pedro Valley, consisting of its terrain and biota, provides the canvas upon which mythical and historical events are perceived and situated. Some of these events are understood as having created elements of the land itself, while other events produced the material culture of past peoples, what we today call the archaeological record. All of these events and their material results, whether natural or cultural, form palimpsests of history—the cultural landscapes that are layered throughout the San Pedro Valley. These landscapes comprise a rich tapestry, or mosaic, of space, time, and cultural traditions.

Conceptually, cultural landscapes encompass both the land itself and how individuals perceive the land given their particular values and beliefs. Cultural landscapes are fashioned by cultural groups from a natural environment, where "culture is the agent, the natural area is the medium, the cultural landscape is the result" (Sauer 1963:343). Cultural landscapes have complexity and power as a result of their creation by people through experience and encounters with the world. People understand landscapes in relation to specific events and historical conditions, and these provide the context for their comprehension (Bender 1993:2).

There are fundamental differences in the ways that American Indians and Euro-Americans conceptualize landscapes. The essential difference is captured in Küchler's (1993:85–86) terminology where "landscapes *as memory*" are contrasted with "landscapes *of memory*." In Küchler's view many indigenous cultural landscapes *are* memory because they constitute the template used to understand and transmit the essential traditions that form recollections. The land itself is as important as the human activities that occurred on and marked the land in earlier times because it is through the land that the past takes form. The land is the past, and it brings the past into the present. In contrast, Euro-Americans envision landscapes as having been marked in the past by features whose remains can today be measured, described, and depicted. Consequently, Euro-American cultural landscapes symbolize memory in the form of historical landmarks that represent an idealized past (Jackson 1980; Lowenthal 1989). For Euro-Americans time advances in a linear progression, which archaeologists and historians seek to systematically reveal through relative and absolute dating techniques (Paynter 2002:86; Preucel and Meskell 2004:9). Land is part of a historical process that produces shifting

images, place-names, and events as the people using land change through time (Anschuetz 2002). For indigenous peoples, however, place and place-names are "integrated in a process that acts to freeze time; that makes the past a referent for the present. The present is not so much produced by the past but reproduces itself in the form of the past" (Morphy 1993:239–240).

American Indians know landscapes by experiencing them through dynamic stories and place-names (Nabokov 1998:242). This stands in sharp contrast to Euro-American knowledge of landscapes derived from the fixed landmarks inscribed on them. The textual character of Euro-American landscapes is related to the practice of making maps to represent social memory. Maps made by Euro-Americans are static representations of geographical space reduced to two-dimensional media, coupled with the cultural and social factors involved in their creation (Monmonier 1996). Euro-American cartography, historically used as a means of appropriating land by drawing it, does not facilitate recognizing space and place through the gestures, dances, rituals, and ceremonies that are essential parts of Native American cultural traditions (Lewis 1998:63). American Indians often have "maps in the mind" (Basso 1996:43), and, as Leroy Lewis, a Hopi participant in this project, pointed out, the mental images that accompany seeing landscapes recall songs and, therefore, history.

American Indians conceptualize cultural landscapes in verbal discourse that has historical and moral dimensions. The place-names and stories associated with landscapes serve as metaphors that both influence how people view themselves and affect patterns of social action (Brody 1981; Ferguson 2002; Thornton 1997). Cultural landscapes are storied landscapes. Puebloan people, for example, use landscape features as metonyms, evoking the image of named places, the values associated with them, and the stories embedded in them (Young 1988:4–9).

Native scholars discuss landscapes in a way that resonates with the theoretical view of "cultural landscapes." Leslie Marmon Silko of Laguna Pueblo, for instance, writes that Pueblo people do not see the land as a mere "landscape" because that implies that people are exterior to or apart from the land. In a Puebloan perspective people are a part of the land:

> *Pueblo potters, and the creators of petroglyphs and oral narratives, never conceived of removing themselves from the earth*

> *and sky. So long as the human consciousness remains* within *the hills, canyons, cliffs, and the plants, clouds, and sky, the term landscape, as it has entered the English language is misleading. "A portion of territory the eye can comprehend in a single view" does not correctly describe the relationship between the human being and his or her surroundings. This assumes the viewer is somehow* outside *or* separate from *the territory he or she surveys. Viewers are as much a part of the landscape as the boulder they stand on. (Silko 1986:84, emphasis in original)*

Native American cultural landscapes are history because they situate tribal members in time and space. The villages where Hopi ancestors lived during their migrations, for example, designate the geography through which they journeyed when traversing the land to fulfill their destiny at the Hopi Mesas (Kuwanwisiwma and Ferguson 2004). When Hopi people visit ancestral sites the history of their migrations is thus evoked. In this sense landscapes are intrinsically historical because they express, as Marshall Sahlins (1981:5) wrote of history, "value in a temporal mode." Accordingly, our Native colleagues do not primarily view ancestral places as scientific resources, as discrete, functional, and mundane archaeological sites. These localities are instead revered as monuments, sacred structures that recall and symbolically commemorate the past. When valued as monuments the fundamental significance of archaeological sites does not derive from their scientific research potential but from their role as enduring physical evidence of where ancestors dwelled in relation to where descendants now reside. The use of archaeological sites as monuments—in part because of their palpable time depth—facilitates the persistence of cultural memory over long periods of time (Bradley 1998:85–100). The meaning of these archaeological monuments is thus as much what they portend for life in the present as what they signify about life in the past.

In some instances the very form of the land itself was shaped during events believed to have occurred in the past, especially events surrounding the actions of spiritual beings. In such an instance the land itself is part of the memory of the past and forms the historical consciousness realized in people's present-day lives (Dinwoodie 2002:60). The ability to identify places in oral narratives with geographic locations is a form of historical validation. Past and present

coexist, and ancient stories are one with current existence (Schaafsma 1997:13; Young 1987:4–7). For instance, Tohono O'odham traditions regarding the distant past are recalled in relation to ancient Hohokam platform mound sites. The culture hero I'itoi (Elder Brother) is implicated, as is his creation and destruction of the Huhugkam who lived in these ancient villages (Bahr et al. 1994). In this conceptual and physical landscape the realms of spiritual beings, ancient ancestors, and the contemporary configuration of the land converge in the cultural present.

Cultural landscapes are created and maintained by cultures that instill values, beliefs, and historical memory in the people belonging to a community. Cultural landscapes, consequently, can be sustained for long periods without physical use. Even after a long absence the cultural processes of memory and history renew links with places that may have been forgotten, irregularly visited, or occupied by others (Morphy 1993:239–240). "We remain a part of any place we visit," Pueblo scholar Rina Swentzell (1993:144) has written, "any place we breathe or leave our sweat." This is not a reinterpretation of landscape but a process of discovery and revelation in which ancestral presence is tangible and immutable.

Landscapes and people cannot be separated; one entails the other. As Andrea Smith (2003:346) has noted, "Knowledge of place is not subsequent to perception but is an ingredient in perception itself." The processes through which cultural landscapes are created and maintained are part and parcel of the processes by which culture instills values, beliefs, and historical memory in people belonging to a community. Keith H. Basso (1996:7) observes that perceiving and talking about landscapes is "a venerable means of doing human history...a way of constructing social traditions and, in the process, personal and social identities." For example, as Basso points out, named locales connect the Western Apache to their ancestors and to the ancestral landscape that is embodied in the place-name and preserved as part of the present-day terrain.

Learning about the past by moving through and experiencing a landscape reproduces the connection between the ancestral past and the land itself (Morphy 1995). Because places and landscapes embody the ancient past for American Indians, talking about them provides a way to share this past with others, thus projecting the past into the contemporary world (Ferguson and Anyon 2001). This process provides American Indians with an alternative approach to history

that is qualitatively different from the academic forms of documentary history embraced by scholars. American Indian histories provide histories that both complement conventional academic research and challenge that research to explicitly address its underlying assumptions and knowledge claims to discern its silences, limitations, and partialities (Wylie 1995). Recognizing that landscape history and documentary history have complementary value is important; one is not inevitably better than the other.

The Character of Time and Space: A Model of Cultural Landscapes

Understanding cultural landscapes is contingent on conceptualizing how different people interact with and perceive a given terrain. In this regard Native people have traditions that dramatically contrast with Western viewpoints dating to the Enlightenment of the seventeenth and eighteenth centuries. The Western perspective embraced by Euro-Americans envisions the land as an entity essentially separate from human beings, easily divisible through boundary-making practices (Mundy 1996). In a Cartesian model of the world territories are imposed on an empty space and divided through binary representations, such as private/public, cultural/natural, closed/open, inside/outside, ours/theirs (Harley 1990; Piper 2002). Thus, for Euro-Americans the landscape becomes an expression of ownership and a representation of power (Colwell-Chanthaphonh and Hill 2004). For many indigenous peoples, however, landscapes are not merely a projection of future possession but historical monuments that recall what has passed. Cultural landscapes do not represent memory, they *are* memory, and their apprehension provides a means to unite the past and the present in a personal experience (Feld and Basso 1996). The meanings of ancient places consequently do not expire but continue to transform and give spiritual meaning to those living in the present. In this way traditional histories are embedded in the land—stories made inseparable from place.

American Indian histories frequently show asymmetrical emphasis on time, space, and events. The passing of time is contracted or expanded, as in traditional O'odham and Zuni narratives in which each break in time is said to be four years, a ritually important number that signifies a much longer period of time. Likewise, historical incidents that are recalled as a single event may constitute a prolonged era. For example, many Hopi accounts of Palatkwapi describe an ancestral

village in the south that was destroyed because of moral decadence (Ferguson and Lomaomvaya 1999:108–114). However, as Hopi scholar Leigh J. Kuwanwisiwma explained to us in an interview, Palatkwapi "is not just a place, a village, but an era, a time period in which things occurred; it climaxed with the end of a village and lifeways, but it was a village that was a center of others and a way of life." In this nuanced view of history Palatkwapi is understood to be an epoch in addition to a place. References to places in traditional knowledge may describe real and specific locales or be used as a narrative trope to symbolically mark movement, directionality, context, or even time itself. Vine Deloria, Jr. (1994:63), has suggested that most Native American traditions privilege space and events over precise temporal concepts, as "American Indians hold their lands—places—as having the highest possible meaning, and all their statements are made with this reference point in mind."

Researchers who work with the archaeological record and American Indian oral traditions are faced with the challenge of fusing these two very different ways of knowing the past. To be sure, much debate has surrounded the issue of how and whether such radically divergent epistemological perspectives can be fruitfully married (Anyon et al. 1997; Echo-Hawk 2000; Ferguson et al. 2000; Mason 2000; Whiteley 2002). Although a few archaeologists have recently engaged oral tradition in important and interesting ways (Bernardini 2005; Lyons 2003a), other archaeologists have not yet fully considered how narratives of the past frame time and space in different ways. Traditional knowledge does not always provide the kind of historical statements archaeologists seek.

The interpretations and values people convey about cultural landscapes turn on their conceptions of time and space. To illuminate how people's statements in the present convey information about the past, we have developed a model of cultural landscapes to decipher what people are really saying about their history (fig. 8). The model expands on the work of Barbara Morehouse (1996) by incorporating the dimension of time into her theoretical arrangement of absolute, relative, and representational space. Time is a crucial element in the human experience, and, indeed, archaeology is uniquely positioned to study the "temporality of the landscape" (Ingold 1993:172). Our model of the cultural landscape begins with the natural environment (the physical world) and material culture of the past (the archaeological record) that both tangibly exist in the present and that people then imbue

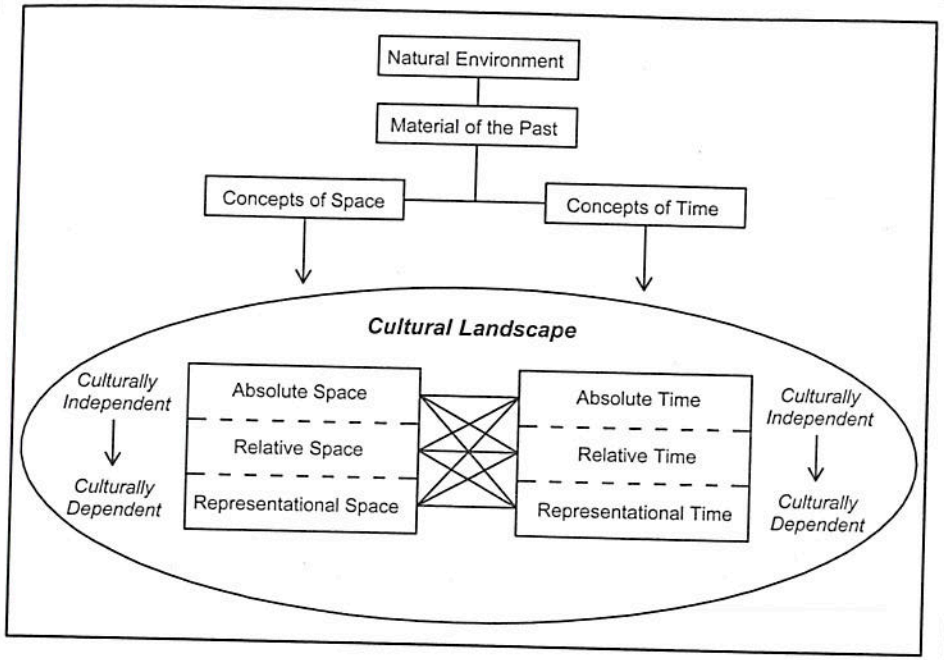

Figure 8 › **A model of the cultural landscape.**
(Center for Desert Archaeology)

with meanings using varying concepts of time and space. "Landscape is time materialized," as Barbara Bender (2002:103) has persuasively shown. These interpretive moments are mediated through personal and shared values that in turn shape how people experience and use the archaeological record. Thus, the fluid construction of cultural landscapes is not reduced to haphazard individual acts nor predetermined by social forces. Human agency and social structure are entangled (Giddens 1984). People perceive the world through moral codes, traditions, norms, and institutions, which they in turn consciously and unconsciously follow, supplant, overlook, and expand.

Absolute space and time are marked and bounded by the physical properties of the space-time continuum—by chronology, topography, latitude, and longitude. The San Pedro Valley, as it exists in tangible space of the physical world, exemplifies absolute space. This absolute space can be specified or described using geodetic coordinates such as the Universal Transverse Mercator System or the State

Plane Coordinate System. Absolute time is exemplified by chronometric measurements, the most precise of which is the NIST-F1 Cesium Fountain Atomic Clock, used as the primary time and frequency standard for the United States. This conception of time is predicated on being able to measure the passage of time along a uniform and continuous linear scale that begins in the past and continues forward into the future. Thus, we can use tree rings to date archaeological sites to a specific year using a temporal scale that constitutes one of the foundations of Western culture. While absolute space and time seem to exist in the "real" world, independent of human thought, absolutes elide truly objective measures. Johannes Fabian (1983:13) noted that Euro-American ideas of time were long tied to biblical chronologies until at last they were "naturalized" to fit the Cartesian coordinate system. The very attempt to define the "absolute" is a cultural act, in other words, and therefore necessarily begins to slip into notions of the relative and representational.

Relative space and time are socially defined with fluid boundaries relative to other objects, and they are thus dependent on who defines them. Relative space, for example, is illustrated in Father Eusebio Kino's 1701 map showing the Greater Southwest as he knew it, informed by his role as a Spanish missionary and his personal experiences with Native peoples there (fig. 9). Relative time is entailed in an O'odham "calendar stick" that records only special events, each one relative to the last and relative to what was important for the O'odham people (fig. 10). O'odham calendar sticks are therefore not marked into equal units, each representing a period of time; the marks on them commemorate extraordinary incidents when they occur. The concepts of relative space and time lie on a continuum between culturally *independent* and *dependent* concepts. Relative space and time therefore mediate between complete objectivity and subjectivity. Relative is the in-between of absolute and representational.

Lastly, representational space and time are encoded with rich cultural symbols and values. An example of representational space is a map of the United States, where the very shape of the place allows it to become an emblem, like a flag that emits powerful connotations if one knows the meanings assigned to its symbols. Representational time is embodied in the notion of Camelot, which does not reference a "real" time but a symbolic golden age where knights were honorable and maidens fair.

Absolute, relative, and representational space can be arranged

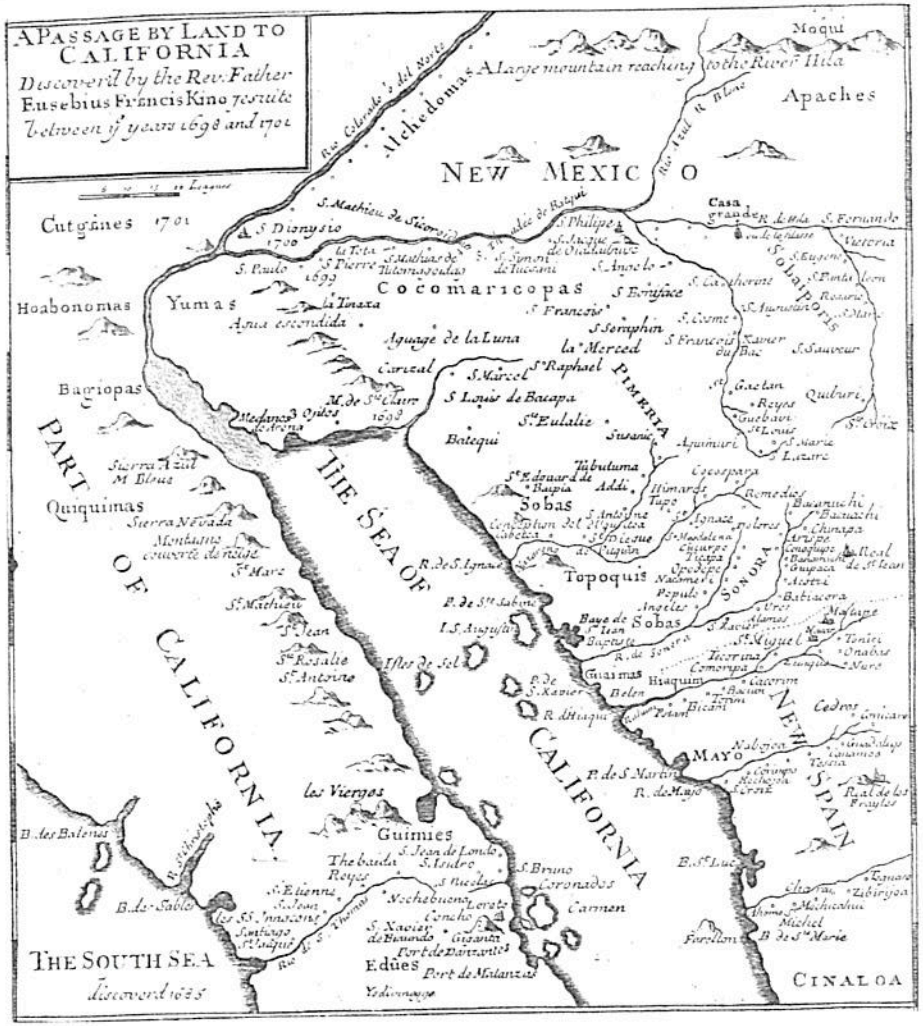

Figure 9 › **The Greater Southwest in 1701—relative to Father Kino's perception of place.** (Courtesy of the Arizona Historical Society/Tucson; map G4412.C3 1701 K52 MAP)

in a matrix that has four quadrants representing various combinations, such as absolute space and representational time or representational space and absolute time. This matrix, used implicitly rather than explicitly, underpins much of our research. Throughout the book the reader will become aware of the range of ways in which Native American advisors discuss the historical past in the social present. At times, advisors clearly discussed events in absolute space and time, such as when the Hopis talked about their visit to Reeve Ruin on May 1, 2002. This event was situated in an unambiguous chronology and physical locale. At other times, such as when our Hopi colleagues spoke about Palatkwapi, the absolute nature of this ancient village dissolved into more symbolic modes of discourse and meaning, with reference to representational time and space (fig. 11). We encountered an example of absolute space and representational time

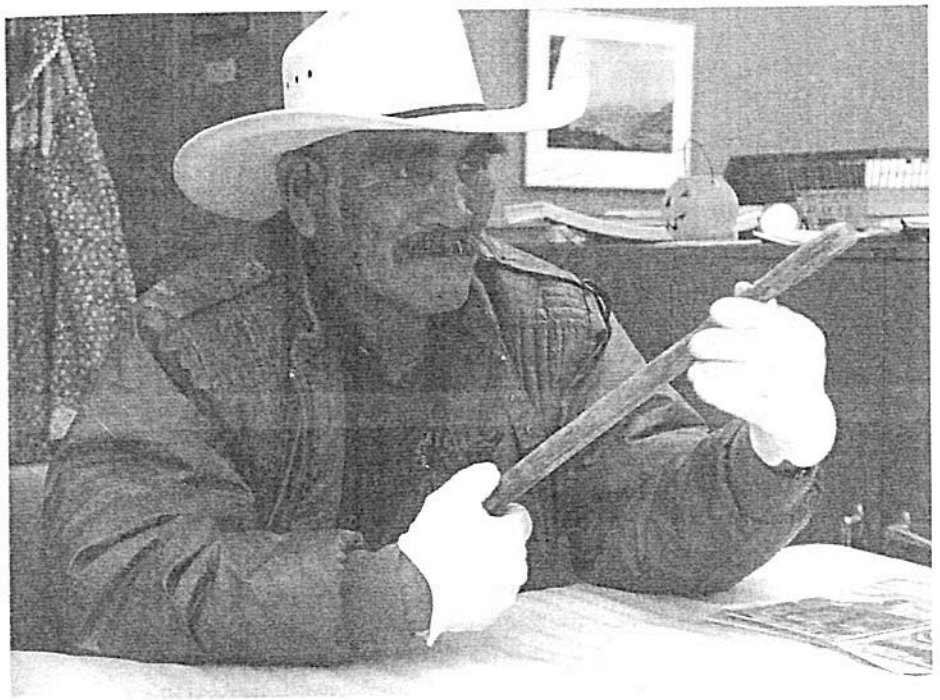

Figure 10 › **Jose Enriquez with an O'odham calendar stick at the Arizona State Museum.** (Bernard G. Siquieros, December 10, 2002)

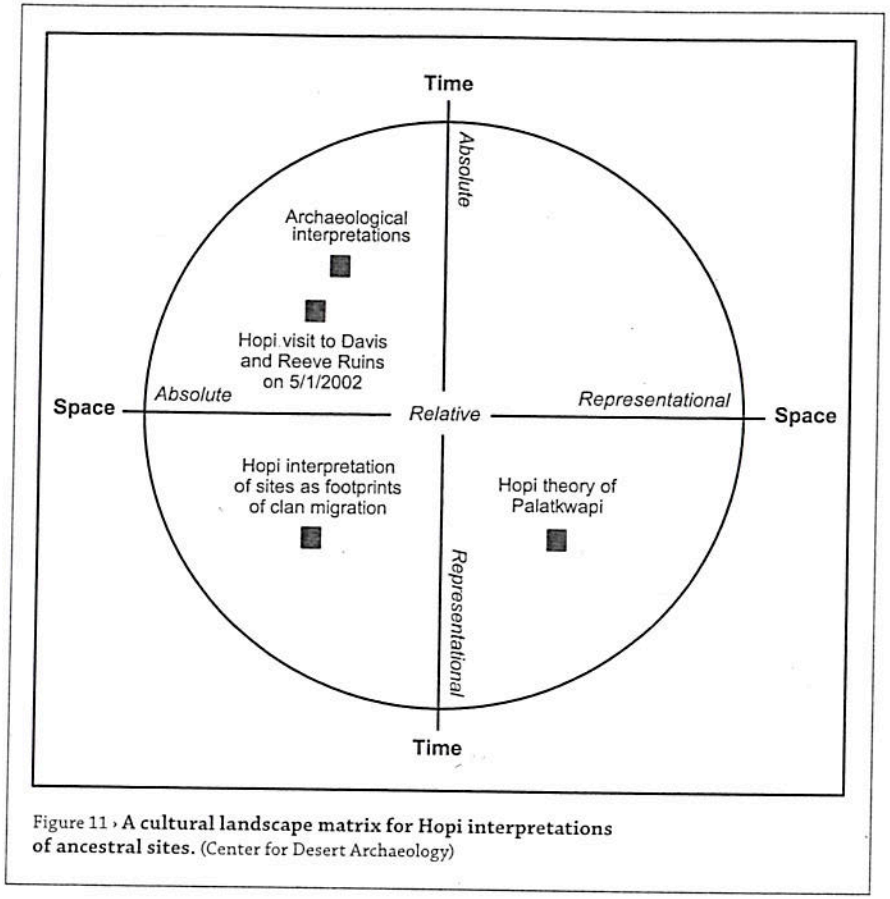

Figure 11 › **A cultural landscape matrix for Hopi interpretations of ancestral sites.** (Center for Desert Archaeology)

in our research when we studied the National Register nomination form for the Camp Grant Massacre Site, which designated an absolute space for the massacre site but justified the nomination using a representational time under the general theme of "Indian Wars." We came across an example of absolute time and representative space when we learned about the Coronado Scenic Trail Byway along State Route 191 in southeastern Arizona. We know the Coronado expedition passed through Arizona in A.D. 1540, but there is no evidence it followed a route that is anywhere near State Route 191. The spatial aspect of this scenic trail byway is clearly representational.

While we do not use the cultural landscape matrix to neatly arrange each and every statement of tribal cultural advisors in a specific quadrant, it

guides our analysis of how statements of the past have differing references to time and space. This helped us understand how what appear to be straightforward archaeological questions (e.g., Is Palatkwapi one of the ruins in the San Pedro Valley?) actually misconstrue how historical concepts are talked about in Native American societies. Quite simply, there is no uniform way of imagining or discussing the past. Linda Tuhiwai Smith (1999:50–56) also reminds us that Euro-American projections of time and space onto the territory of Native peoples is not innocuous—it is often an endeavor to perceive the world as a mirror of Western civilization. Hence, to recognize alternative perspectives of time and place not only allows for more effective dialogue between archaeologists and Native peoples but also challenges historical arrangements of power that privilege a Western emphasis on the absolutes of time and space.